

IN THE CLAIMS

Please amend claims 1-9, 11-22, 24-25, and 40-62 as follows below.

Please add new claims 63-69 that follow below.

The following listing of claims replaces all prior versions, and listings, of claims in the application:

MARKED UP CLAIMS

1           1. (Currently Amended)    A fiber optic module  
2    comprising:  
3                a push-actuator movably coupled to the fiber optic  
4                module, the push-actuator to move inward into the fiber  
5                optic module and release the fiber optic module from a  
6                cage assembly in response to the push-actuator being  
7                pushed; and  
8                one or more electro-optic transducers within the  
9                fiber optic module to convert optical signals into  
10               electrical signals or electrical signals into optical  
11               signals.

1           2. (Currently Amended)    The fiber optic module of claim  
2    1, wherein [[,]]  
3                the fiber optic module is ~~an SFP~~ a small form  
4                pluggable (SFP) fiber optic module and the cage assembly  
5                is an SFP cage assembly.

1           3. (Currently Amended)     The fiber optic module of claim  
2 1. wherein [[,]]  
3           the push-actuator is a push button.

1           4. (Currently Amended)     The fiber optic module of claim  
2 1. wherein [[,]]  
3           the push-actuator is a kick actuator.

1           5. (Currently Amended)     The fiber optic module of claim  
2 1. wherein [[,]]  
3           the push-actuator includes one or more grooves to  
4           slideably ~~engage~~ couple to the fiber optic module.

1           6. (Currently Amended)     The fiber optic module of claim  
2 1. wherein [[,]]  
3           the push-actuator slides inward to release the fiber  
4           optic module from the cage assembly.

1           7. (Currently Amended)     The fiber optic module of claim  
2 1. wherein [[,]] the push-actuator includes  
3           one or more ramps to release ~~which cause~~ the fiber  
4           optic module ~~to be released~~ from the cage assembly ~~when~~  
5           in response to the push-actuator [[is]] being pushed.

1           8. (Currently Amended)     The fiber optic module of claim  
2 1. further comprising:  
3           a second actuator having a first end with one or  
4           more ramps and a second end opposite the first end along

5        ~~one side,~~ the push-actuator to couple to the second end  
6        and slide ~~causes~~ the second actuator to ~~slide to~~ release  
7        the fiber optic module from the cage assembly.

1        9. (Currently Amended)        The fiber optic module of claim  
2        1, wherein [[,]]  
3                the push-actuator includes  
4                        an orientation indicator to indicate the fiber  
5                optic module which the push-actuator releases.

1        10. (Previously Presented)        A fiber optic module  
2        comprising:  
3                a push-actuator to release the fiber optic module  
4        from a cage assembly, the push-actuator includes  
5                a push tab,  
6                a shaft coupled to the push tab at a first end,  
7                and  
8                a hook coupled to a second end of the shaft;  
9                and  
10               one or more electro-optic transducers to convert  
11               optical signals into electrical signals or electrical  
12               signals into optical signals.

1        11. (Currently Amended)        The fiber optic module of claim  
2        1, wherein [[,]]  
3                the push-actuator is located at a bottom side of the  
4        fiber optic module.

1        12. (Currently Amended)        The fiber optic module of claim  
2        1, further comprising:

3           a nose having a nose grip to pull out on the fiber  
4           optic module.

1           13. (Currently Amended)   A ~~[[The]]~~ fiber optic module ~~of~~  
2   ~~claim 1 further~~ comprising:

3           a push-actuator movably coupled to the fiber optic  
4           module to release the fiber optic module from a cage  
5           assembly;

6           one or more electro-optic transducers within the  
7           fiber optic module to convert optical signals into  
8           electrical signals or electrical signals into optical  
9           signals; and

10          a rigid pull-tab rigidly coupled to the fiber optic  
11         module, the rigid pull-tab to pull and withdraw ~~disengage~~  
12         the fiber optic module from the cage assembly.

1           14. (Currently Amended)   The fiber optic module of claim  
2   13, wherein ~~[[,]]~~

3           the rigid pull-tab includes a shield to contain EM  
4           radiation.

1           15. (Currently Amended)   The fiber optic module of claim  
2   13, wherein ~~[[,]]~~

3           the rigid pull-tab is located at a top side of the  
4           fiber optic module and the push-actuator is located at a  
5           bottom side of the fiber optic module.

1           16. (Currently Amended)   The fiber optic module of claim  
2   13, wherein ~~[[,]]~~

3           the rigid pull-tab is located at a bottom side of  
4           the fiber optic module and the push-actuator is located  
5           at a bottom side of the fiber optic module.

1           17. (Currently Amended)   The fiber optic module of claim  
2   13, wherein [[,]]  
3           the rigid pull-tab is coupled to ground.

1           18. (Currently Amended)   The fiber optic module of claim  
2   13, wherein [[,]]  
3           the rigid pull-tab includes  
4           a pull grip having dimples to prevent slippage.

1           19. (Currently Amended)   The fiber optic module of claim  
2   13, wherein [[,]]  
3           the rigid pull-tab is formed of a conductive  
4           material.

1           20. (Currently Amended)   The fiber optic module of claim  
2   13, wherein [[,]]  
3           the rigid pull-tab is formed of a solid material.

1           21. (Currently Amended)   The fiber optic module of claim  
2   13, wherein [[,]]  
3           the rigid pull-tab is formed of metal.

1           22. (Currently Amended)   The fiber optic module of claim  
2   13, wherein [[,]]  
3           the rigid pull-tab is formed of a plastic.

1           23. (Previously Presented)           A fiber optic module  
2 comprising:  
3           a push-actuator to release the fiber optic module  
4 from a cage assembly;  
5           a pull-tab to disengage the fiber optic module from  
6 the cage assembly, the pull-tab includes  
7           an arm to couple to the fiber optic module, and  
8           a handle at an end of the arm for a user to  
9 grab the pull-tab;  
10          and  
11          one or more electro-optic transducers to convert  
12 optical signals into electrical signals or electrical  
13 signals into optical signals.

1           24. (Currently Amended)   The fiber optic module of claim  
2 13, wherein [[,]]  
3           the handle of the pull-tab has  
4           a grip to grip the handle with one or more  
5 fingers of the user.

1           25. (Currently Amended)   The fiber optic module of claim  
2 13, further comprising:  
3           a nose having a nose grip to pull out on the fiber  
4 optic module.

1           26. (Previously Presented)           A fiber optic module  
2 comprising:  
3           a push-actuator to release the fiber optic module  
4 from a cage assembly;

5           a pull-tab to disengage the fiber optic module from  
6       the cage assembly, the pull-tab includes  
7           a pull grip,  
8           a lever arm coupled to the pull grip,  
9           a shield coupled to the lever arm, and  
10          grounding tabs coupled to the shield;  
11       and  
12          one or more electro-optic transducers to convert  
13       optical signals into electrical signals or electrical  
14       signals into optical signals.

1       27-39. (Cancelled)

1       40. (Currently Amended) . A fiber optic module  
2       comprising:  
3           means for converting optical signals into electrical  
4       signals or electrical signals into optical signals; and  
5           means for disengaging the fiber optic module from a  
6       cage assembly by depressing a push button, the fiber  
7       optic module including the push button.

1       41. (Currently Amended)   The fiber optic module of claim  
2       40, further comprising:  
3           means for slideably engaging the means for  
4       disengaging, the means for slideably engaging coupled to  
5       the fiber optic module.

1       42. (Currently Amended)   The fiber optic module of claim  
2       40, further comprising:

3 means for withdrawing the fiber optic module from  
4 the cage by pulling, the means for withdrawing coupled to  
5 the fiber optic module.

1 43. (Currently Amended) The fiber optic module of claim  
2 [[40]] 42, further comprising:

3 means for slideably engaging the means for  
4 disengaging, the means for slideably engaging coupled to  
5 the fiber optic module.

1 44. (Currently Amended) The fiber optic module of claim  
2 40, further comprising:

3 means for indicating the fiber optic module which  
4 the means for disengaging releases, the means for  
5 indicating coupled to the fiber optic module.

1 45. (Currently Amended) The fiber optic module of claim  
2 40, wherein [[,]]

3 the means for disengaging ~~the fiber optic module~~  
4 includes [[,]]

5 means for lifting a latch to disengage the  
6 fiber optic module from the cage assembly by  
7 depressing the push button.

1 46. (Currently Amended) A method of disengaging a fiber  
2 optic module from a cage assembly, the method comprising:

3 pushing a push-button of the fiber optic module to  
4 release a latch; and

5 pulling a pull-tab of the fiber optic module to  
6 disengage the fiber optic module from the cage assembly.



1           47. (Currently Amended)   The method of claim 46, further  
2 comprising:  
3           determining if the latch has been released.

1           48. (Currently Amended)   A method of engaging a fiber  
2 optic module to a cage assembly, the method comprising:  
3           inserting ~~[[the]]~~ a fiber optic module into an  
4 opening in ~~[[the]]~~ a cage assembly, the fiber optic  
5 module having a push button movably coupled thereto;  
6           pushing the fiber optic module into the cage  
7 assembly; and  
8           determining if the fiber optic module is fully  
9 inserted into the cage assembly by checking whether ~~[[a]]~~  
10 the push button ~~coupled to~~ of the fiber optic module is  
11 fully extended out from the fiber optic module.

1           49. (Currently Amended)   ~~[[A]]~~ The method of claim 48,  
2 further comprising:  
3           pushing the fiber optic module into the cage  
4 assembly if the push button is not fully extended out.

1           50. (Currently Amended)   The fiber optic module of claim  
2 10, wherein ~~[[,]]~~  
3           the push-actuator is a push button.

1           51. (Currently Amended)   The fiber optic module of claim  
2 10, wherein ~~[[,]]~~  
3           the push-actuator is a kick actuator.

1           52. (Currently Amended)   The fiber optic module of claim  
2 10<sub>a</sub> wherein [[,]]  
3           the push-actuator is located at a bottom side of the  
4           fiber optic module.

1           53. (Currently Amended)   The fiber optic module of claim  
2 10<sub>a</sub> further comprising:  
3           a nose having a nose grip to pull out on the fiber  
4           optic module.

1           54. (Currently Amended)   The fiber optic module of claim  
2 10<sub>a</sub> further comprising:  
3           a pull-tab to disengage the fiber optic module from  
4           the cage assembly.

1           55. (Currently Amended)   The fiber optic module of claim  
2 23<sub>a</sub> wherein [[,]]  
3           the push-actuator is a push button.

1           56. (Currently Amended)   The fiber optic module of claim  
2 23<sub>a</sub> wherein [[,]]  
3           the push-actuator is a kick actuator.

1           57. (Currently Amended)   The fiber optic module of claim  
2 23<sub>a</sub> wherein [[,]]  
3           the push-actuator is located at a bottom side of the  
4           fiber optic module.

1           58. (Currently Amended)   The fiber optic module of claim  
2 23<sub>L</sub> further comprising:  
3           a nose having a nose grip to pull out on the fiber  
4           optic module.

1           59. (Currently Amended)   The fiber optic module of claim  
2 26<sub>L</sub> wherein [[,]]  
3           the push-actuator is a push button.

1           60. (Currently Amended)   The fiber optic module of claim  
2 26<sub>L</sub> wherein [[,]]  
3           the push-actuator is a kick actuator.

1           61. (Currently Amended)   The fiber optic module of claim  
2 26<sub>L</sub> wherein [[,]]  
3           the push-actuator is located at a bottom side of the  
4           fiber optic module.

1           62. (Currently Amended)   The fiber optic module of claim  
2 26<sub>L</sub> further comprising:  
3           a nose having a nose grip to pull out on the fiber  
4           optic module.

1           63. (New)           The fiber optic module of claim 1, further  
2 comprising:  
3           a base portion of the fiber optic module under the  
4           one or more electro-optic transducers, the push-actuator  
5           moveably coupled to the base portion to move inward into

6 the fiber optic module and release the fiber optic module  
7 from the cage assembly in response to being pushed.

1 64. (New) The fiber optic module of claim 8, wherein  
2 the push-actuator includes a push button to be  
3 pushed.

1 65. (New) The fiber optic module of claim 10,  
2 further comprising:  
3 a base portion of the fiber optic module under the  
4 one or more electro-optic transducers, the push-actuator  
5 moveably coupled to the base portion to move inward into  
6 the fiber optic module and release the fiber optic module  
7 from the cage assembly in response to being pushed.

1 66. (New) The fiber optic module of claim 65,  
2 further comprising:  
3 a second actuator having an end with one or more  
4 ramps and an opening, the hook of the push-actuator mated  
5 with the opening to couple the push-actuator and the  
6 second actuator together, the push-actuator and the  
7 second actuator to move together to release the fiber  
8 optic module from the cage assembly.

1 67. (New) The fiber optic module of claim 11,  
2 wherein  
3 with the fiber optic module inserted into the cage  
4 assembly, the bottom side of the fiber optic module is  
5 nearest to a printed circuit board upon which the cage  
6 assembly is mounted.

1           68. (New)           The fiber optic module of claim 12,  
2 wherein  
3           the push actuator is moveably coupled to a base  
4           portion of the nose, and  
5           the nose has one or more optical receptacles aligned  
6           with the one or more electro-optic transducers.

1           69. (New)           The fiber optic module of claim 68,  
2 further comprising:  
3           a pull-tab coupled to the nose, the pull-tab to pull  
4           and withdraw the fiber optic module from the cage  
5           assembly.